REMARKS

Claims 1-3, 6-13, and 15 and 16 are pending. Claims 1-3 and 6-10 have been allowed. Claims 11 and 12 have been rejected and 13, 15 and 16 objected to because they depend on the rejected base claims. Claims 11 and 12 have been amended according to the Examiner's suggestions so as to put the claims in condition for allowance. Claim 13 has been amended to remove a typographical error. Accordingly, claims 13, 15 and 16 now depend on allowable claims.

Figure 9 clearly states that it is a new sheet and is presented as a formal figure under 37 CFR 1.121 (d).

Figures 10-1 – 10-4

In the office action dated April 18, 2006, the Examiner determined that the sequences for BpmI, AcuI and possibly ThaIV are essential matter even though these specific endonucleases are not recited in the claims. Applicants respectfully disagree with the Examiner that this is essential subject matter.

However, in response to the office action dated November 17, 2006, Applicants submitted an additional figure (Figs. 10-1 – 10-4) confirming that the sequences of BpmI, AcuI, BsgI and ThaIV were highly conserved sequences and contained domains that had been previously classified by Malone et al. The use of these conserved sequences for forming new endonucleases are shown in Examples 5-8.

At the time of filing the present application, only the sequence for BpmI was publicly disclosed (see SEQ ID NO:4). Consequently, Figure 10 has been deleted from the specification. The Figure however remains of public record in the present file. This Figure is further evidence that the present method is valid and enabled.

Changes to page 34

Applicants amended the specification on page 34 in the response dated November 17, 2006 to correct a typographical error. The Examiner has suggested that this is not an explanation for the change. Pages 4, 7, 27, 28/29 of the application repeatedly refers to domains - X, I, II, III, IV, V, VI, VII, VIII,--- It would be clear to a person of ordinary skill in the art that there is a typographical error on page 34 that places domain X after domain IV since this does not make sense in the context of the example. Consequently, Applicants have not modified the application.
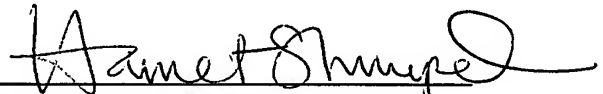
CONCLUSION

For the reasons set forth above, Applicants respectfully submit that this case is in condition for immediate allowance. Early and favorable consideration leading to prompt issuance of this Application is earnestly solicited.

Applicants petition for a three-month extension of time and enclose a notice of appeal. Applicants submit check in the amount of $760 to cover these fees. Please charge any deficiencies to Deposit Account No. 14-0740.

Respectfully submitted,

NEW ENGLAND BIOLABS, INC.

Date: June 7, 2007

Customer No.: 28986

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